Amendments to the Specification

Please replace the paragraph beginning at page 13, line 29 with the following rewritten paragraph:

The present invention is addressed to method, system and apparatus for accurately evaluating a temperature related physical parameter within the body of a patient. Accurate temperature measurement is achieved through the use of one or more tetherless ~~teatherless~~ temperature sensors strategically located within the body and configured with a passive resonant circuit. These passive circuits respond to an extra body applied excitation electromagnetic field by resonating at an identifiable unique resonant center frequency. In one embodiment, the resonant circuit based sensors are configured with a capacitor and a series coupled inductor formed with a winding disposed about a ferrite core. That ferrite core is formulated to exhibit a somewhat sharp permeability state change or transition at a Curie temperature corresponding with a desired temperature setpoint. With the arrangement, upon being excited by an applied excitation burst, the sensor will ring or resonate at its unique, signature resonant center frequency when at monitor temperatures below the involved Curie temperature. As the sensor witnesses monitoring temperatures approaching the Curie temperature defined setpoint the intensity of its unique resonant center frequency decreases, an aspect which may be taken advantage of from a temperature control standpoint. However, when the Curie or target temperature is reached, the relative permeability of the sensor's ferrite core drops sharply toward a unity value to, in turn, cause a sharp drop in the reluctance of the associated inductor coil causing the resonant frequency of the device to shift substantially upward in value. This shift is to an off-scale value. In effect, the signature output disappears. As the sensors resonate in response to excitation, the detector components of the associated interrogation system are capable of sensing all of the resonating devices, whereupon the sensed signals are digitized, averaged and analyzed to identify each sensor by its unique resonant center frequency, if at the noted monitor temperatures. Such analysis may be carried out using a Fourier transform-type approach. Because the unique resonant center frequency remains stable as the temperatures witnessed by the sensors, approach or transition toward the Curie temperature-based setpoint, the amplitude of the Fourier transform signal will diminish and the system has the capability of predicting the arrival of the Curie based setpoint temperature. Thermal overshoot can thus be more accurately accommodated for.